

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.







# agricultural marketing

NON-FOOD  
BUYING  
IN  
GROCERY  
STORES



## Contents

November 1961

USDA Researchers Market Test New Wheat Product	3
Class III Prices in New York Milkshed	5
"Tailor-Made" Food Products	6
New and Better Packaging of Pears	7
How to Test for Baking Quality in Wheat	8
Economic Implications of a Food Stamp Program	10
Livestock Market News Reporter	12
Nonfood Buying in Indiana Supermarkets	14
Sales Volume—Mark of Successful Grocery Sales	15
Determining Net Profits on Grocery Items	15
Plentiful Foods for December	16

## Reprint material

All articles may be reprinted without permission. Prints of photos and art used in this issue can be obtained from Photo Library, U. S. Department of Agriculture, Washington 25, D. C.

## Cover page

Today's supermarkets are stealing a lot of the glory once reserved for the chameleon—that remarkable Old World lizard that could change its colors instantly, according to its current mood or surrounding conditions.

For, what our forebears once knew as the corner grocery store—selling mainly foodstuffs—is taking on the appearance of a modern and complete department store, both in size and myriad offerings. Just step up and name almost any nonfood item you want, and it's there: household ladders, electric fans and heaters, toys, blankets, linens, rugs, china, many items of furniture and toys—even rubber swimming pools for the children.

That's why, in one recent span of a dozen years—from 1947 to 1959—trade sources indicate grocery store food sales have dropped from 88 percent to only 80 percent of total sales. Thus, nonfood items gained by 8 percent.

Page 14 tells the story of today's supermarkets, and how they've just "grown and grown", at the same time shaking off the word "groceries" which Noah Webster many long years ago defined as "chiefly foodstuffs". That definition is now past history, for if Mr. Webster were living today he'd probably have to scratch his old white head thinking up a new-fangled definition which would not only include the foods you eat, but the countless household items now found at a supermarket.

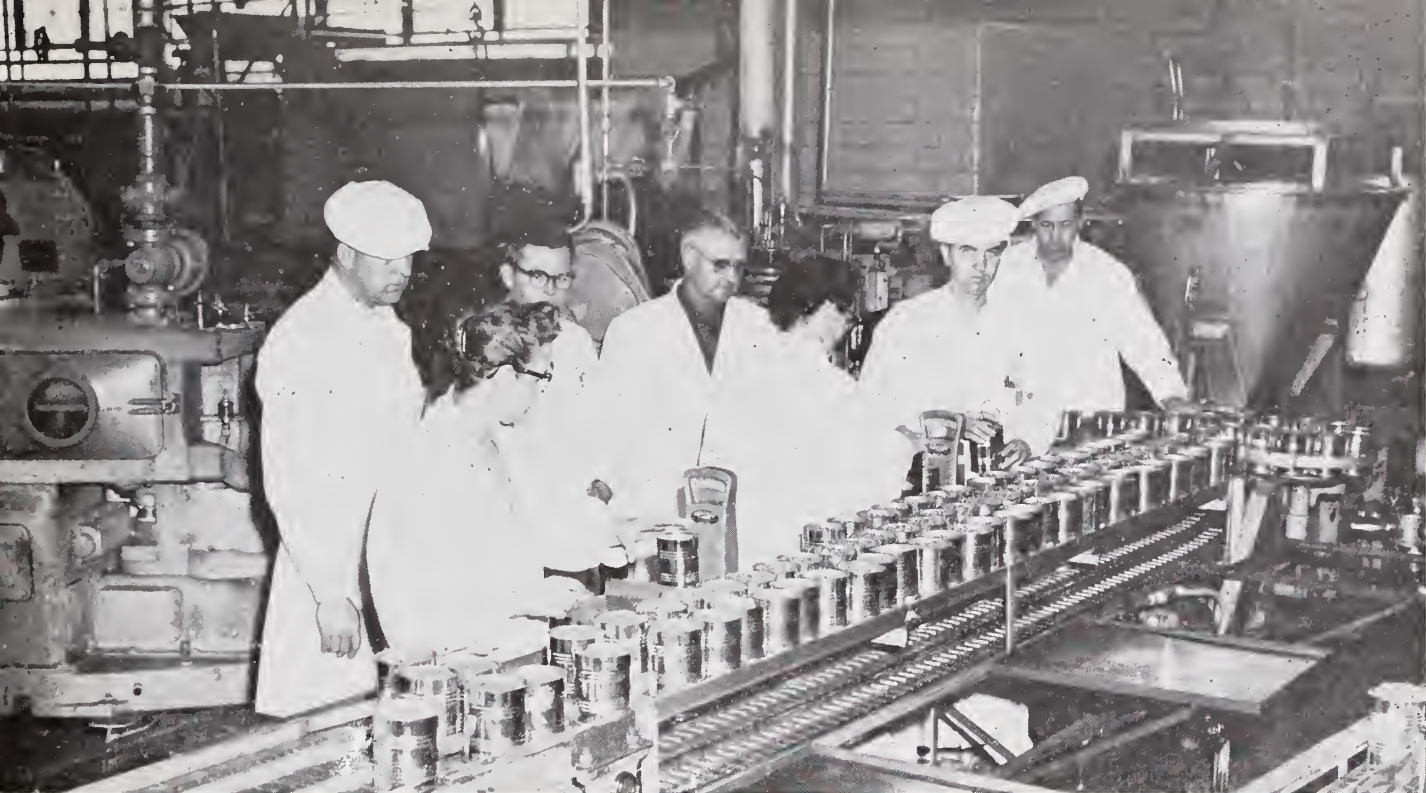
Yes—just as the supermarkets' neon lighting fixtures have supplanted the sputtering old oil or gas lamps—their unlimited offerings today continue to widen the eyes of all the Nation's oldsters.

Editor, MILTON HOFFMAN

Assistant editor, DANIEL W. HICKY

AGRICULTURAL MARKETING is published monthly by the Agricultural Marketing Service, United States Department of Agriculture, Washington 25, D. C. The printing of this publication has been approved by the Bureau of the Budget, March 18, 1959. Yearly subscription rate is \$1.50, domestic; \$2.25, foreign. Single copies are 15 cents each. Subscription orders should be sent to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.





First can of vacuum-packed, precooked, whole-kernel wheat food that adapts itself to any dish from soup to dessert rolled off processing lines early in January 1961 in Trenton, Missouri. Processing techniques developed by USDA's Western Utilization Lab in Albany, Calif.

# USDA RESEARCHERS MARKET TEST NEW WHEAT FOOD PRODUCT

by CARL SORENSON and EDWARD J. RAZINSKY

**B**ANNERS waving over the Nation's wheat-producing States may soon feature a new canned wheat food product—if the preliminary results of USDA market tests are any indication.

The product—a vacuum-packed, precooked, ready-to-eat, whole kernel wheat convenience food—began going through market tests in Wichita, Kansas, in March of this year under a name indicating that it is ready to serve. Although all of the returns from the market tests are not in as yet, Haven D. Umstott of the Economic Research Service, USDA, reported in a paper delivered to the Kansas Wheat Commission on September 7th, that preliminary results indicate "... that the test product possesses commercial possibilities."

Marketing researchers of the Market Potentials Branch, Marketing Econom-

ics Division, recorded sales of the new product during the first phase of the tests—a 10-week period—along with those of 57 competing products like rice and canned spaghetti.

In the first four weeks of this phase, promotion by private groups featured in-store displays and demonstrations—49,000 Swedish meat balls and tuna croquettes made with the new wheat food were served to shoppers.

Researchers found that sales during this promotion period ranged from 5 cases per week in each store in the first week to 3½ cases in the fourth week.

The last six weeks of the first phase had no promotion at all. Average sales ranged from about 1½ cases weekly in each store at the beginning of the non-promotion period, to about two-fifths of a case at the end. In comparison, only 23 percent of the other 57 items audited chalked up sales of two-fifths of a case or more a week.

During the second phase—a six-

week period—limited promotion in newspapers, radio, and television was used for three weeks followed by no promotion. Store demonstrations were eliminated and sales of 11 of the original 57 competing items were recorded along with the test product.

Sales, during this phase, averaged two-fifths of a case per week in each store. The new product outsold 80 percent of the competing commodities tested.

In the third phase—a 15-week period that is now underway at this writing—weekly sales of the wheat product alone were recorded. So far, the wheat food sales are better than 60 percent of the 57 original food products audited in the first phase.

Other major questions still had to be answered: Was there a permanent demand? Why did purchasers buy in the first place? What was it that they liked or did not like about the product? Would they continue to buy the new canned whole grain wheat food even after the newness wore off?

To answer these questions, a team

The authors are staff members of the Marketing Information Division, AMS. Mr. Sorenson is stationed in Dallas, Texas, and Mr. Razinsky is in Washington, D. C.



of marketing researchers made a household survey a few weeks after the end of the first phase. Telephone interviews were made with 2,700 households to find out whether or not they were aware of the product and had bought it. For those who had purchased the canned wheat, the telephone interview was followed up with a personal visit to find out how they had used the product, and what they thought of it.

Three-fourths of the homemakers interviewed knew that the canned wheat food was being sold in the stores, and 18 percent had purchased it (and 1 out of 5 of these purchasers had bought it more than once). When asked what made them buy, over half indicated that they were curious and wanted to try it. Twenty percent indicated that they liked the taste of a sample that they had been given. Ten percent simply liked wheat; 14 percent bought it because it was a Kansas product.

Although the data on use and satisfaction have not been fully analyzed, it would appear that most users were satisfied with the product—7 out of 10 reporting that they planned to continue using the product. Of these 7, better than half reported that they planned to use it once a week or more.

When purchases tended to settle down in the week following the household survey, the question arose as to whether these purchases were being made by regular customers or by a continuous stream of new purchasers. To answer this question, a follow-up survey was made two months after the first household survey. The researchers found that 9 percent of all homemakers had purchased the canned wheat during the period between the two surveys. About half of these were new purchasers. The remaining half of the 9-percent group had made one or more purchases at the time of the first survey.

But these tests give only part of the story on the new canned wheat food. A large part has been written by the cooperation and inspiration of many devoted groups.

Perhaps the beginning came with the Kansas wheat farmers who recognized a problem and then set out to do something about it.

"Investigate . . . explore . . . research . . . find answers. Do anything as long as you develop new uses, new markets for wheat." That was the advice Kansas wheat growers gave as they encouraged State legislators to establish the Kansas Wheat Commission in 1957.

Now, the new wheat food is part of

the Commission's attempt to follow the farmers' advice.

With funds from a 2-mill tax paid by Kansas growers on each bushel of wheat sold, the Kansans began grinding out possible solutions to a problem that would be a blessing in most parts of the world: A supply of wheat greater than the demand.

The Kansas Wheat Commission teamed up with the Kansas Association of Wheat Growers, Kansas State Board of Agriculture, Great Plains Wheat, Inc., and USDA.

This team surveyed all fields, considered underdeveloped areas, explored new markets, made use of all available help. They decided on new convenience food uses for wheat—something home cooks, institutional feeders, and gourmets could serve with ease and pride.

They enlisted the aid of USDA (1) to develop practical processing techniques; and (2) to determine market potentials and help with other marketing problems.

Food scientists at USDA's Western Regional Research Lab at Albany, Calif., came up with the new product and the Department was issued a patent in 1960. This still left the matter of adapting lab methods to large-scale production and to market testing the new product.

In processing the new wheat food, the coarse outer bran—from 3 to 7 percent of the kernel's weight—must be removed to give the finished product a pleasing "pearl."

"Everybody knew how to debran wheat until it got down to doing it," recalls Walter Graber, administrator of the Kansas Wheat Commission.

But the problem was solved with help from USDA researchers. At the outset, an ordinary cement mixer was used for adding moisture to "temper" the kernels so too many would not crack. The wheat was debranned by running it, twice, through a battery of commercial rice hullers.

Only one food processing plant was found in the area that could provide the required vacuum—26 inches—about twice that used for canning. This was at Trenton, Missouri.

Then, the No. 303 cans they had planned to use, collapsed under so much vacuum. Cans and labels had to be redesigned. They now use a special 307 x 306 can—shorter and fatter than the 303's.

After production difficulties cleared,

the growers concentrated on marketing the new product.

First, the infant product had to have a name and a contest was used to supply one. More than 2,000 ideas came in from all parts of the Great Plains. Twenty-five suggested "ready wheat" with various spellings. Five saw it the same and the judges concurred. So the name chosen indicates that it is ready to serve.

Then, a label. Several ideas were considered. Typical red-wheat color won out. The label features a modern interpretation of a threshing stone, used by pioneers for threshing wheat.

Many other marketing problems were solved by placing contracts with established firms—processors, brokers, distributors, and retailers.

Promotion of the new canned wheat food in Kansas became a Statewide community project. Civic clubs, farm organizations, and private businesses cooperated. Merits of the product were extolled by exhibits in hotels, theaters, airports, banks, stores, and other places where public traffic was heavy.

Special recognition came to the new product when it was named the official Kansas Centennial Food, served as Kansans observe 100 years of Statehood this year.

At this point in the market testing it's hard to say exactly what part this new product will play in solving wheat's supply-demand problem. It is just one new wheat product among many other possibilities. But, in summing up, Haven Umstott found from the preliminary data available, that ". . . this new wheat food has some real pluses.

"It is a product of excellent wholesomeness with some new convenience features, and it appears to be considered a good buy on a cost and price basis with other prepared foods. Although it has not as yet achieved a sustained rate of sales as high as hoped for, the new canned wheat food outsold many established prepared foods, both during and after the promotion period."







About a third to half of the milk produced in the NY-NJ Milkshed is channeled into Class III. More of the milk is used for ice cream than for any other single item.

## A Study of Class III Prices in NEW YORK MILKSHED

**M**ANY CHANGES and refinements have been made in milk pricing and marketing practices since the old days of wide-open competition. A report by USDA's Economic Research Service suggests how present practices might be improved even more in the country's biggest milk market, the New York-New Jersey Milkshed.

The most important finding in the report is that prices for Class III milk (primarily for manufacture into dairy products) have been below competitive levels. To get an idea of relative prices, D. A. Clarke, Jr., professor of agricultural economics at the University of California, and Louis F. Herrmann of USDA's Marketing Economics Division, compared Class III prices with those paid producers in other areas, with prices of finished products less estimated processing costs, and with the cost of ingredients from alternative milk sources. Although these measurements are not exact, they are a close approximation of the price situation.

The study indicates strong support for low prices. Some processors have testified at hearings that if the price is set too high their milk purchases would not only decline gradually, but higher prices could, in time, cause them to close their plants and move to an area where they can do business more profitably. However, the researchers also found that processors in other

areas might have greater reason to move to the NY-NJ Milkshed. Prices paid by processors in other areas are higher than those in this milkshed.

Class III prices are important because most of the growing quantities of milk produced in the NY-NJ Milkshed must be absorbed by this Class. In this milkshed, Class III milk is used in ice cream, cheese, part of the cream produced in the milkshed, and other manufactured dairy products.

About a third to half of the milk produced in the milkshed is channeled into Class III. More of it (1.1 billion pounds in 1959) is used for ice cream than for any other single item. Cream for other markets is the next largest single product (700 million pounds) in Class III.

Minor improvements in two of the present price formulas could give farmers higher prices. For instance, a formula for sour cream. Presently, fresh (Class II) and stored (Class III) cream are used to make sour cream. Class III cream is preferred by processors because it sells at a lower price. More fresh cream then goes into storage and drops to the Class III price. Farmers would benefit if the price formula were adjusted so that processors paid the same price for Class III milk going into sour cream as they do for fresh cream.

Another minor adjustment could be made in the price formulas for milk

used in cheese. New York cheese frequently sells at a higher price than Midwestern cheese. Any premium paid for New York cheese could be passed on to the farmer if the price formula were revised to allow for this factor.

Clarke and Herrmann, in addition to studying measures which could strengthen the present price system, also compared the system with two others.

One alternative, negotiating Class III prices, might bring farmers higher prices. In many Federal order milk markets other than the New York-New Jersey marketing area, various types of premiums over the minimum established prices have been negotiated in recent years. But in the past, bargaining between producers and dealers frequently failed to maintain stable prices. And farmers of today are in no better bargaining position, with milk supplies so abundant. In fact, correction of the gross price inequities of earlier years was one of the strongest reasons producers sought Federal milk marketing orders in the first place.

Another alternative, production controls, has had less appeal, historically, than either open competition or administered prices. To administer production controls, the pricing agency would pursue virtually the opposite course it now takes in assuring markets for all the milk farmers want to produce. Instead, the pricing agency would seek to raise prices by controlling the quantity of milk produced.

However, strict controls on production can be unfair to some producers, and to potential producers as well. The details of several theoretical systems for controlling production are given in the researchers' report. The systems that were considered would create a new cycle of problems. The marketing researchers have recommended further study on various phases of the market and on alternative systems of determining milk prices.

A more detailed analysis of Class III pricing in the New York-New Jersey Milkshed may be found in the report MRR-466. A free copy may be obtained from the Office of Information, USDA, Washington 25, D. C.

The February 1961 issue of *Agricultural Marketing* includes an overall profile of this milkshed. For a broader understanding of Federal milk marketing orders in general, see Miscellaneous Publication No. 732, also available from the Office of Information, USDA.



Marketing leaders see increased demand on farmers for more

## "TAILOR-MADE" FOOD PRODUCTS

A PROFESSOR, a retailer, and a processor took a hard look at today's market for farm products and came up with the same answer:

The American homemaker with all forms of transportation at her disposal has a half dozen stores where she can shop for the farm products that she wants. And the producer, processor, and distributor who provide her with foods that meet her specifications are the ones most likely to survive in the buyer's market of today.

Speaking before the annual meeting of the National Association of County Agricultural Agents in New York, Professor Herrell DeGraff of Cornell University told the group that intense competition among stores for the consumer's food dollar—at its highest peak in history—is leading to greater demands on the farmer for more "tailor-made" products.

The specifications, however, are not arbitrary. They are not, DeGraff said, simply because the competition will not let them be. And an even more scientific and technologically advanced agriculture is permitting producers to deliver to the increasingly discriminating specifications that are being written.

In consequence, the consumer is receiving products with which she is more satisfied. The marketing system is reducing waste. And the total efficiency of food production and distribution is increased.

But at the same time, DeGraff pointed out, the technologically less-adjusted segment of agriculture—typically our smaller and less-organized producers—are progressively losing out. And in this drive for greater marketing efficiency, today's more direct and shorter channels of distribution are bypassing historic steps in the marketing channels which we have looked upon as the price-making points.

As fewer and fewer products go through central terminal markets the "price-finding" function of these markets is weakened.

To Howard F. Nuss, Executive Vice-President, The Welch Grape Juice Co., the old law of supply and demand is still the best answer to American farmers' production and marketing problems.

In his speech to county agricultural agents, Nuss told them that "... farmers who restrict their production to the quality and quantity of each commodity that the market can absorb stand a better chance of surviving in today's market than those who grow all of the merchandise, regardless of its quality standard, that they can force from the land."

Using this company as an example, as their total stock is owned by growers, Mr. Nuss told the group that strict quality control is the key to their uniformly high quality in the finished product, not only throughout one year, but from year to year.

Not only is quality control maintained but supply control as well. "We have geared our business," Nuss said, "to the consumer market, and not to how much the membership would like to produce."

The importance of quality products to meet consumer demands was also emphasized by a retailer. Gerald Achenbach, President of Piggly Wiggly Sims Stores, Inc., told county agents that upholding quality standards and building consumer satisfaction is the only way to build sales and increase profits in marketing farm products.

The greatest favor that county agents can do for fruit and vegetable growers, Mr. Achenbach reminded them, is to convince growers to keep the product

that won't sell at home. Fruit and vegetable growers are only cutting into their own profits made from quality produce when they put poor merchandise into retail channels.

Achenbach also said that retail food store studies showed that most consumer dissatisfaction with beef is caused by toughness or too much fat. Consumers want lean beef that is tender; they also dislike excess fat on pork cuts.

"I am not trying to tell you how to run your business," Mr. Achenbach told the agents, "but I think I would start looking at the livestock shows with sort of a quizzical eye and mull over what happened when people woke up to the fat problem in hogs and the demand promptly switched from the wasteful lard-type to the leaner meat-type hog."

Nearly 1,500 agricultural agents and their families gathered from 48 of the Nation's 50 States for this, the 46th, annual meeting of county agricultural agents. It was the first national meeting ever held in New York.

The agents not only sat down to listen to leaders in industry, education, and government discuss marketing, they also got a first hand look at farm products produced in their areas move through the marketing channels of the world's largest food markets. "Marketing in Action" was the main theme of the meeting.

County agents visit large meat-processing company in the New York metropolitan area.







## New and Better Packaging of Pears

by DONALD R. STOKES

**H**IGHLY perishable pears—so beautiful in the grower's orchard—too often are bruised and discolored by the time they are offered to the consumer in the retail store. In consequence, sales suffer.

How to prevent this damage during shipment and repeated handling in marketing channels long has been a problem of pear growers, packers, and receivers.

After considerable study, AMS marketing researchers believe they've found an answer in new and better packaging methods.

Earlier, these researchers had evaluated or developed suitable consumer trays, overwrap films, interior cushion pads, and master containers. Now they were ready to see how these new prepackaging methods withstood the strain of shipping and distribution.

Carloads of Western pears were carefully examined at Eastern markets. These pears, prepackaged in molded pulpboard consumer trays and overwrapped in shrinkable film, were in almost perfect bruise-free condition. This has been almost impossible to obtain in the standard wood box, due to pressure bruises which cause discolored spots to develop on the pears as they ripen.

AMS marketing researchers used a new master container, a cheap molded pulpboard consumer size tray, and an

inexpensive film—a shrinkable type which did not require wastage of film over the ends of the tray. And they eliminated cushion pads between the layers, to get down to a reasonably economical package.

The total cost of packaging materials for prepackaging pears this way ran to roughly \$1.12 per master container—25 packages, 5 layers of 5 trays, each holding from 5 to 8 pears. The comparable cost of packaging materials for prepackaged pears using an equivalent standard wood box was 80 cents.

Cooperating retailers were glad to pay a premium for the prepackaged pears for these reasons:

1. They saved money by eliminating the cost of packaging materials and labor to package the pears in the store.
2. Losses from waste and spoilage were reduced.
3. And customers were buying more pears.

In this AMS marketing research study the consumer tray most widely used was designed to hold 5, 6, 7, or 8 pears—depending on the size and shape of the pears.

It could be used for all sizes as well as varieties of pears, thus cutting down the costs to inventory the trays. Also, a master container of the same dimensional size, except for depth, was used.

Researchers found that one of the major problems they encountered in prepackaging was that softness of the molded pulpboard trays caused relaxation of the shrinkable film in retail stores.

They also discovered that a taut film

is essential to immobilize—or hold the pears in a secure, steady position—to assure maximum attractiveness and appearance in retail store displays. Also, tests have shown that more rigid trays tend to prevent the film from loosening and thereby detracting from the appearance of the pack.

Here's how the film was shrunk over the tray: The pears were placed in a molded pulpboard tray, and a sheet of film was wrapped around the tray and sealed on the bottom. The tray was then moved through a 300 degree F. heat tunnel for 3 seconds. This shrank the film around the tray and left the ends open for ventilation.

It is essential to hold the pears in firm place in the container to prevent discoloration and bruising which results from movement or excessive pressure on the individual pears. In each individual consumer tray the pears should be held in a level position, and so should each layer.

Another thing: It is also important to have the right size dimensions in the master container, for if the master containers are too large, the excess space between the individual packages will permit the pears to move back and forth even slightly during shipment.

Also, AMS marketing researchers found that a combination shredded paper-wood excelsior compression pad proved best for a top cushion pad to insure a tight pack. Depending on the size of pears, 1 of 2 cushion pads were used on top of the pack. None, though, was used between the layers of pears nor on the bottom of the pack.

The author is Head, Packaging and Container Research, Transportation and Facilities Research Division, AMS.

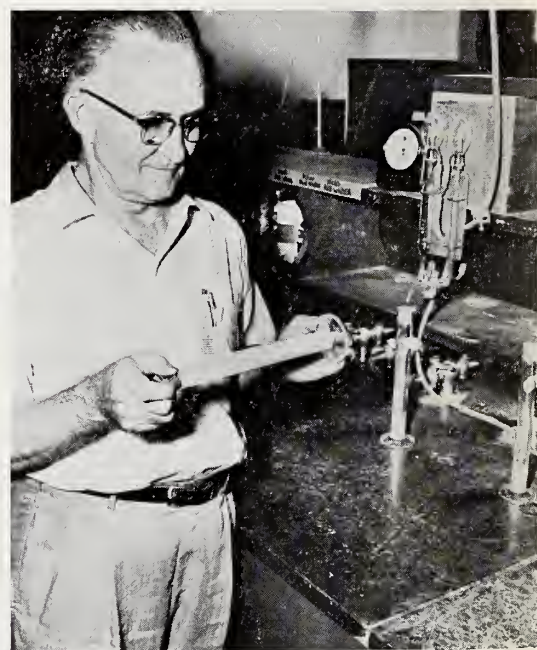
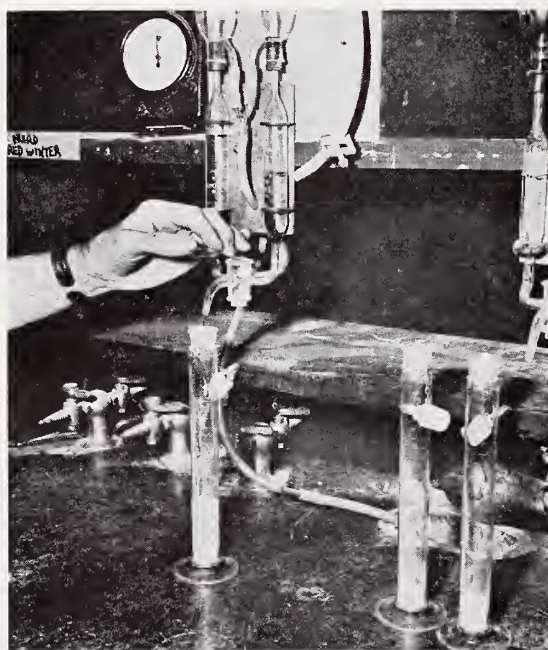




1. Make and record a moisture test on a clean (dockage removed) sample of wheat.



2 and 3.—Grind about 200 grams of this sample through motor-driven corrugated steel roll mill. Rerun sample through 4 more times (total of 5 times). Place the ground wheat on a 100 mesh woven wire sieve and sift by horizontal circular motion at 200 r.p.m. for 1½ minutes. Discard bran. Yield of flour should be about 25 grams. Weigh out 3.2 grams for the test.



4, 5 and 6. Transfer the weighed sample into a 100 ml. glass-stoppered graduated cylinder. From an automatic burette add 50 ml. of a solution of 4 mg. of brom phenyl blue in a liter of distilled water. Thoroughly mix flour and water by moving cylinder horizontally lengthwise alternating right to left, 12 times in each direction in about 5 seconds.



# HOW TO TEST FOR BAKING QUALITY IN WHEAT

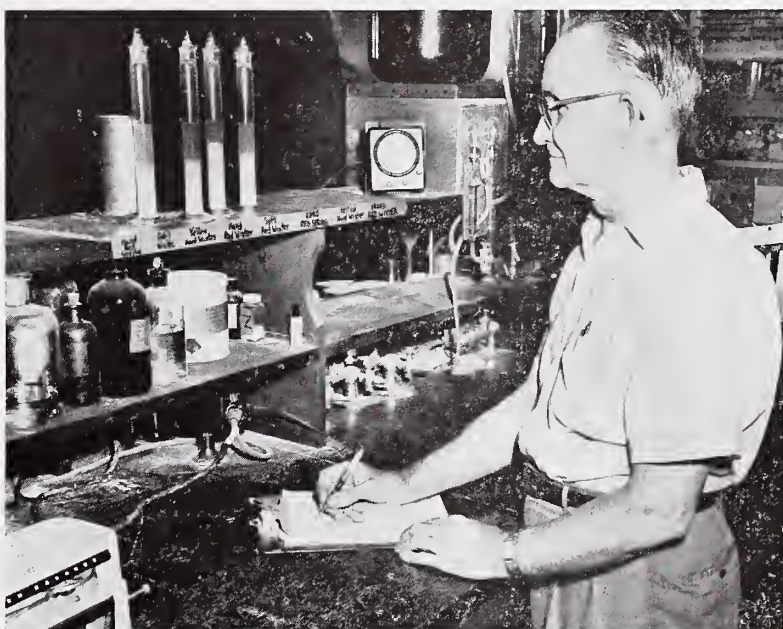
Starting with the 1962 wheat crop, premiums for quality of Hard Red Winter and Hard Red Spring wheats will be included as part of the price-support operation.

The premiums, which will reflect better than the current protein premiums the baking quality of wheat, are being included because of the need to encourage production of more high-quality wheat, both for domestic use and for export.

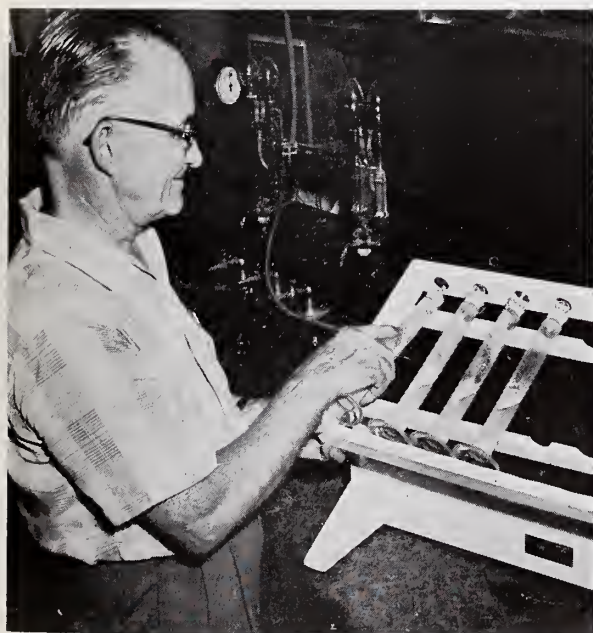
The sedimentation test is a simple and rapid way to estimate the strength and quantity of wheat protein. How the test is made is illustrated on these facing pages.



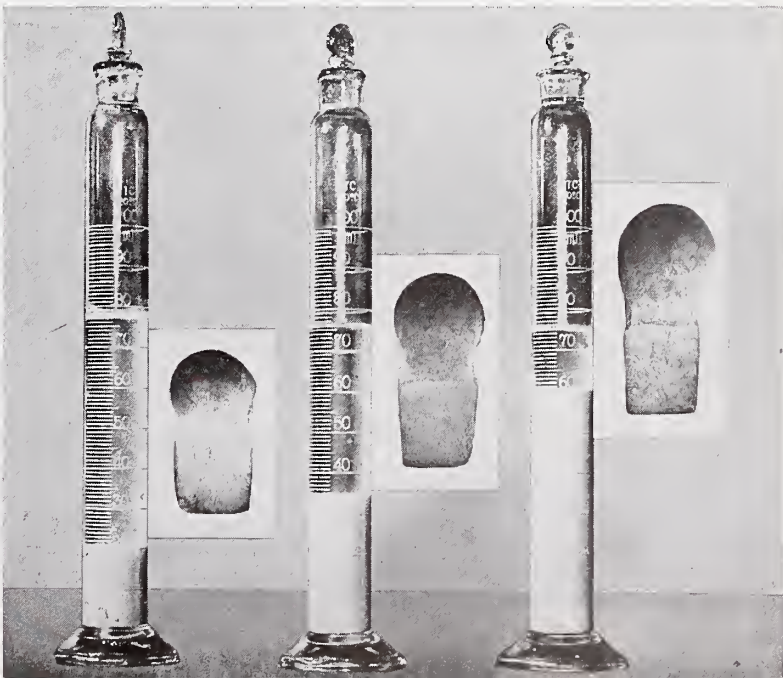
8 and 9. Remove cylinder and add 25 ml. of a reagent containing 0.5 normal lactic acid and 20 percent isopropyl alcohol and return to the rocker. Mix for 5 more minutes. Then read volume of sediment in the cylinder. A light back of cylinder makes easy reading. Record results and adjust to the 14 percent moisture level of the wheat. This is the sedimentation value.



10. There is a close relationship between the size of loaf and the amount of sediment suspended in the liquid in graduated cylinder.



7. Place cylinder on a rack designed to rock through a 60° arc—30° each side of the horizontal position at the rate of 40 times per minute. Mix for 5 minutes.







A food stamp program allows families to buy whatever farm foods they want and need, and enables them to get more adequate diets.

## A distinguished economist discusses economic implications of FOOD STAMP PROGRAM

by FREDERICK V. WAUGH

THE FARMER and the general public have become much interested in programs to make our food surpluses available to needy people in foreign countries. With the aid of several big government programs we have greatly increased food exports. This is good. It helps the American farmer and it helps underdeveloped countries abroad. But let us all remember that we still have a job to do at home. We still have needy families who are not getting adequate diets.

This has long been recognized. It is a well-established policy to give United States consumers the first prior-

ity. Doubtless this will continue to be the policy, whether we decide to have a national food stamp program or not. We already have a national school lunch program, a special milk program, and programs of "direct distribution" of food to institutions and to needy families.

The real question is not whether we will make foods available to needy people in this country. Rather, it is how we will do it.

The U. S. Department of Agriculture is now testing a food stamp program in 8 depressed areas. Such pilot operations are too small to have any measurable effects upon the national economy. But the whole purpose of a pilot operation is to see if we can develop a workable program that could be extended to other areas and perhaps made into a national program to reach low-income families throughout the country. Such

a national food stamp program would have many important economic implications. I shall list and discuss briefly some of the main implications to *needy families*, to the *food trades*, to *government*, to *farmers*, to *general business*.

### Needy Families

In principle, at least, a national food stamp program would aim at making it possible for any family, regardless of income, to get a nutritionally adequate diet. This is far different from the direct distribution program of recent years. It is even substantially different from the improved direct distribution program of recent months.

While it has been generally agreed for many years that needy families in this country should have the first call on our food surpluses, some have always argued that a government pro-

Dr. Waugh, Director of the Economic and Statistical Analysis Division, Economic Research Service, headed a task force appointed early in 1961 to set up a pilot study for a food stamp plan.



gram should be limited to doling out whatever foods happen to be in the stocks of the Commodity Credit Corporation as a result of price-support operations. The big CCC surpluses have been wheat, corn, and cotton. For that reason, direct distribution programs were often severely limited and were not designed to improve the diets of needy families.

In recent months, the direct distribution program has been substantially improved by adding such foods as canned meats and dried eggs. A food stamp program would go much further. It would allow needy families to buy whatever farm foods they wanted and needed, and would enable them to get enough food purchasing power to buy more nearly adequate diets.

The stamp program would be entirely voluntary. Low-income families, when properly certified by State or local welfare agencies, would be allowed to buy enough food stamps to get a nutritionally adequate diet. Those families with no income at all would be given free stamps. But all other families would have to buy the stamps. They would pay varying prices, depending upon incomes. In all cases, though, they would pay less than the market value of the stamps. For example, they might get \$10 worth of food stamps for \$7 if they were able to afford that much; or perhaps for \$5 if their incomes were very low. Thus, a food stamp program is essentially a means of pricing food according to ability to pay.

Of course, such a program does not guarantee that every participating family will get an adequate diet. Some may spend their food stamps unwisely. But Federal, State, and local agencies will give them advice and guidance. And the food stamp program will make it possible for them to afford good diets.

### Food Trades

Unlike direct distribution, a food stamp program would operate entirely through private industry. The government would not buy, process, nor distribute any of the foods under this program. All of this would be done by the regular private food trades, including retail stores.

Just as this program would be voluntary on the part of needy families, it is also voluntary on the part of retailers.

If a retailer wanted to participate—as practically all of them probably would—he would have to agree to live up to certain regulations. Especially, they would have to agree not to accept

food stamps in payment for such things as liquor and tobacco. Participating retailers would accept food stamps.

Local banks would redeem them, and in turn would turn them over to the Federal Government for repayment. Essentially, the government would create a new kind of food money and would buy it back from the banks.

### Government

A national food stamp program would involve many difficult administrative problems. Especially it would require policing to see that the stamps were properly used and to prevent various kinds of chiseling and fraud. So far, these administrative problems have not been too difficult in the pilot operations in the 8 depressed areas. This is because there has been excellent cooperation on the part of local agencies and food trades.

Of course, the administrative problems would become much more difficult in the case of a national food stamp program. In the case of direct distribution, the Federal Government has left administrative problems mainly to State and local governments. These agencies do not take any responsibility for increasing the total food consumption of needy families. They simply donate whatever surpluses happen to be available. The administrative problems of

the food stamp plan are more difficult mainly because the program aims at increasing total food consumption of participating families and improving their diets.

### Farmers

If a national food stamp program proves to be workable and not too expensive to operate, it would not only improve the diets of needy families, it would also strengthen the markets for many important farm products—especially for meats, poultry products, dairy products, and many fruits and vegetables. Those who argue that a food stamp program “is not a farm program but a welfare program” seem to overlook the obvious implications of the program to farm income. A national food stamp program would clearly strengthen the domestic market for many important perishable foods. They happen to be the foods that are getting very little price support through crop loans and similar programs. But they are extremely important foods.

Moreover, they are foods with a real future in the domestic market. In the long run, we clearly need to shift from some of the so-called “basic crops” to animal products and related foods that will be needed in the diets of domestic consumers. A good national food stamp program would help this shift. It would help use some of the surplus resources in agriculture.

Of course, a food stamp program, even on a national scale, would not solve all farm problems. It would be of little help to cereals, and none at all to cotton. It would not be adequate to handle all local and temporary surpluses. We still would need outlets for the commodities acquired by CCC under price-support loans. We still have to do something about production adjustment.

But, in my opinion, no single program is a cure-all for the agricultural problems that confront us. A food stamp program would not only be a good health program—it could also be, dollar-for-dollar, one of the most effective farm programs; that is, a dollar spent on a food stamp program could return as much or more to the farmer as a dollar spent on most alternative programs.

### General Business

We should not think of farm programs in isolation as if they were designed solely to help the farmer. Actually, an  
(continued on page 16)

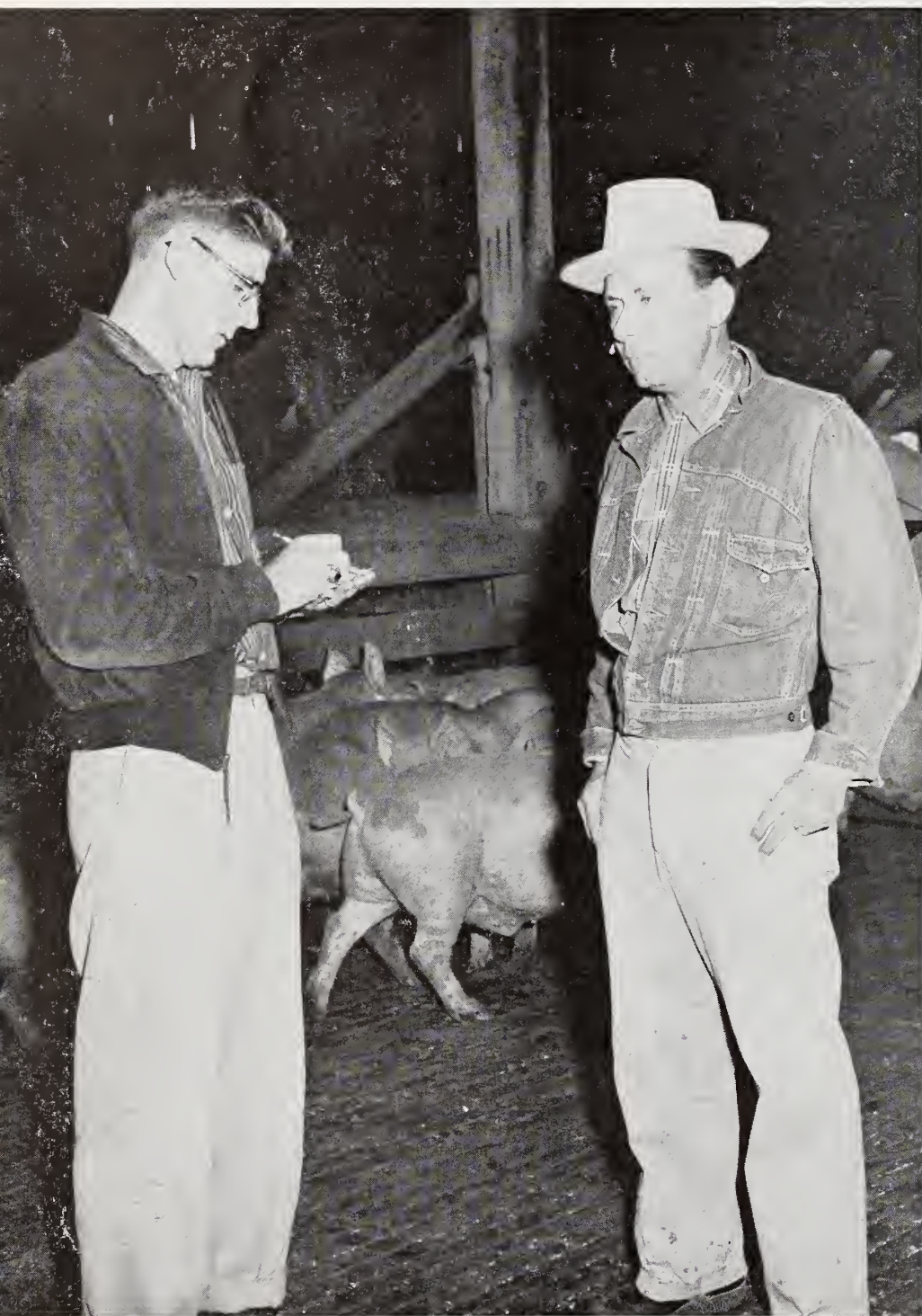


Program operates entirely through private industry. All distribution of foods is made through regular channels of trade.



# THE LIVESTOCK MARKET NEWS REPORTER

by MILTON M. LINDELOF and ROBERT W. NORTON



A livestock market news reporter from USDA's Agricultural Marketing Service discusses market situation with salesman as he determines price trends for hogs at this market.

**A** CENTURY AGO, when Texas cow-punchers started a cattle drive up the Chisholm Trail, they relied upon returning cattlemen for information on "goin' prices." Since the days of the "Old West," livestock marketing has been completely transformed by modern transportation—but the desire for market information has not diminished. In fact, today more than ever, buyers and sellers are demanding accurate, up-to-date information of the latest trends.

And, market information still depends on a man—today it is the livestock market news reporter. He is a member of a fast, efficient team in USDA's Livestock Market News Service in the AMS Livestock Division.

Livestock market news reporting by USDA was initiated back in 1918 with the first report coming out of Chicago on June 1 of that year. From this beginning, the service has been expanded into 47 reporting offices covering trading at major terminal markets, auctions, and direct sales in important production areas.

Terminal market sales are reported at about 30 principal livestock trading centers, with range and feedlot direct sales covered throughout the West and Southwest. Direct marketing of hogs is reported in the Illinois, Iowa-Minnesota, and Georgia-Florida-Alabama direct buying areas. Auction sales are covered by Federal reporters at about 15 locations with State reporters under Federal technical supervision, covering another 100 auctions.

Wool trading is reported at the Boston primary wool market with some coverage of sales in western wool producing areas. Wholesale meat trading is handled at a number of important centers with emphasis on carlot sales.

This is the broad picture, but how does "the man" fit in? What does he do and how does he work? Nowadays, the "freshman" reporter is usually a recent graduate in animal husbandry from one of the Nation's accredited agricultural colleges—although a person may qualify through experience alone or combined experience and education.



After meeting the initial Civil Service requirements, the new reporter embarks on an intensive six-month training program under the guidance of seasoned reporters. He receives extensive work in grading livestock, including frequent grading correlations where the live animal grade is compared with the carcass grade.

His first assignments are usually in gathering basic sales information. Throughout the training period, he keeps close at hand his handbook containing detailed instructions on terminology, collection of information, preparation of reports, dissemination, and other services. As his training progresses, he is given added responsibilities on an increasing basis until he is fully capable of reporting a livestock market.

Though his "formal" training ends after six months, his education in market news reporting is by no means complete. The ideal livestock market reporter is a composite of varied skills. By virtue of education and experience, he is expected to be a competent judge of livestock with respect to grade, weight, price, etc.

He must be a diplomat in his relationships with the public and be a keen judge of character in determining reliable sources of information. He must be constantly alert to separate fact from fancy and be able to express himself both orally and in writing—and so must be somewhat of a journalist.

And, as if this is not enough, he must strive to master the fundamentals of management, economics, and marketing in addition to keeping currently informed on the national livestock picture. Thrown in with this is the need for speed and accuracy. The value of market news decreases sharply if it is not disseminated quickly. Even then, it would be of no value if it were not accurate. The reputation for accuracy and impartiality is the hard-rock foundation upon which the prestige and value of the Livestock Market News Service is built.

In the course of a day's work, a reporter interviews numerous buyers and sellers. As he is talking with these people, he is evaluating their statements in relation to the reports of others. He is constantly circulating around the yards, looking at livestock, and gathering all the information available on movements, supply, demand, prices, and price trends. He must be alert for those individuals who attempt to influence his market report to their advantage.

In a sense, he is like a baseball umpire, in that he "calls 'em as he sees 'em."

To collect market facts on the hog trade in direct buying areas, he must rely upon telephone contacts, personal observation of selling operations at frequent intervals, and checking sales records. A reporter in range and feedlot areas of the West and Southwest also gathers sales information by telephone; by viewing cattle; and interviewing feedlot operators, ranchers, and livestock buyers. As in terminal market operations, the emphasis is placed on personal observation by the reporter to insure accuracy.

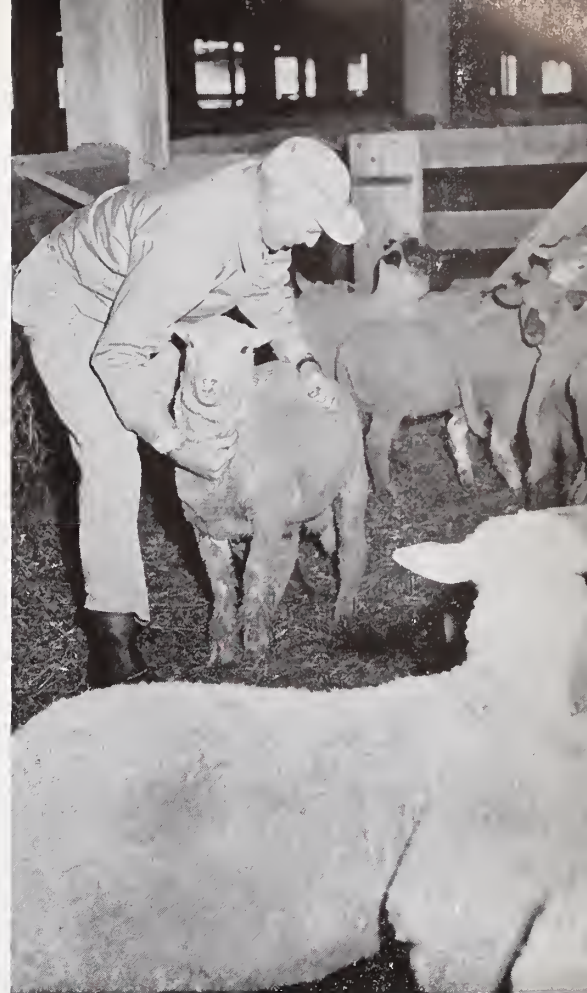
This is only the first half of the story. Next comes the distribution of information to the livestock industry—fast enough to be of value. To speed its release to all news outlets, market news is flashed from coast to coast over 13,000 miles of leased teletype lines that connect most of the Government's Market News offices. The reports are also fed through commercial teletype circuits to members of the trade, producer organizations, and to others who request and pay for this added service.

The reporter is continually evaluating his information and sending out periodic reports throughout a trading day. He may have numerous deadlines to be met at different stages of trading. These deadlines may mean a series of telephone calls to various radio stations, where his up-to-the-minute market reports will be put on the air, sometimes straight from a phone booth in the stockyards. Or, he may phone the information to his office to be sent out over the wires for use by buyers and sellers in another part of the Nation.

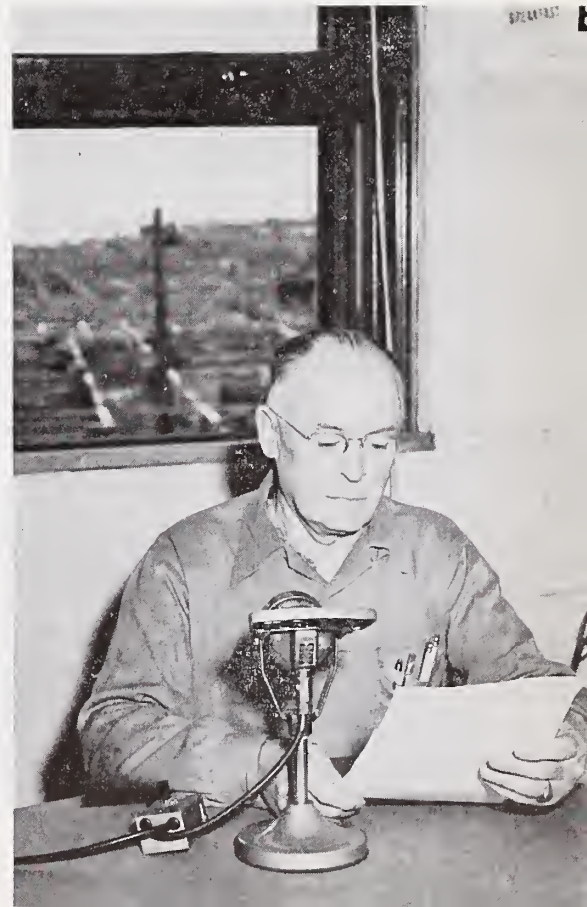
Information collected throughout the day is quickly compiled for release to the public through all available news outlets—radio, television, newspapers, wire services, bulletin boards, mailed reports, and personal contacts.

Still, the story does not end here. Tomorrow, the market news reporter will be going through the same steps. Each day he must start from scratch in building a finished product—an accurate, timely, and uniformly-worded market report containing information vital to the entire livestock industry.

Mr. Lindelof is Reporter in Charge, Livestock Market News Office, South St. Joseph, Mo. Mr. Norton was a student assistant in the Marketing Information Division, AMS, at the time the story was written.



Reporter grading a lamb; later, will compare his grading with actual carcass grade. Below, livestock reporter broadcasting the latest market news direct from stockyards.





# THE RETAIL MARKET



## NONFOOD BUYING

Modern supermarkets and consumer buying habits are expanding the definition of "groceries." Webster's dictionary defines it as "chiefly food-stuffs." But supermarket sales have not stopped there.

Nonfood sales in groceries have increased steadily. And they are continuing to account for a larger share of total grocery store sales.

Trade sources indicate that food sales represented 88 percent of total grocery store sales in 1947, but only 80 percent in 1959. At the same time, beer, wine, and liquor sales jumped from 2 percent of the total to 5 percent. Other nonfoods were only 10 percent of total grocery sales in 1947, but a big 15 percent in 1959.

This trend is pictured in a study made by Cleo Fitzsimmons and Sarah L. Manning, of Purdue University's Agricultural Experiment Station, working in cooperation with USDA's Economic Research Service.

These marketing researchers used the Indianapolis, Indiana, market area for their study. They watched the

passing parade of purchasers in the groceries, collecting data on what was bought and by whom.

In the Indianapolis stores studied, about 18 percent of the total spent by customers went for nonfood items (beverages and gum in addition to tobacco and other inedibles.) Of the average 12 items per shopping basket, 2 were nonfood. About 60 percent of the shoppers observed had at least 1 nonfood item in their baskets, and 6 percent had only nonfoods.

They also found that, in general, nonfood buying tended to be higher in suburban stores than in grocery stores located in city centers, residential areas, and in small towns. But when you exclude beer and wine, which small town stores did not stock, the stores in small towns sold a higher proportion of nonfood items than stores located in the other areas.

Male shoppers, apparently, have the least sales resistance to nonfood items—especially without women along to restrain them. As an example, the researchers found that infrequent shoppers (usually men) buy larger amounts of nonfoods. If the little woman follows them around, their basket has less nonfood items. When the woman shops alone, the nonfood share of her basket is about 17 percent.

As for kinds of nonfoods purchased, researchers saw soaps, detergents, paper goods, household care items, tobacco products, and health and beauty aids—most frequently and in that order—in shopping carts. But, in terms of dollar value, tobacco products led the list.

With the exception of beer and wine, most shoppers spent less than a dollar for each nonfood item. Spending for individual nonfood items ranged from 16 cents to \$1.69 per shopping group.

While men shoppers seemed to be heavy buyers of nonfood groceries, they were not the big spenders. In the stores studied, a man shopping alone spent an average of \$3.09. A woman alone bought \$4.21 worth of groceries. But

the man-woman combination, on the average, spent \$9.77. Adding children to the shopping group brought the total to an average of \$11.47.

However, there were variations in spending based on store location. For instance, per person weekly spending in city center stores was the highest, \$8.84, of the four store locations studied. On the other hand, spending per shopping trip in city stores was the lowest—apparently these shoppers make more than one shopping trip each week.

Age is also a factor. The older the principal shopper (person in the shopping group who directed the buying) the less important was nonfood buying. The older the shopper the more time she spent on each item.

On the average, each shopping group took about a minute to buy an item.

Although the study was directed towards nonfood buying, Fitzsimmons and Manning were able to shed some interesting light on customers' shopping habits. For instance, they found that it is common for customers in city centers and small towns to shop from store to store. Suburban and residential shoppers usually buy in one store.

The most frequently given reasons for selecting a particular store involved time saved for the customers. This included such things as: convenient location of store; store has everything the customer wanted; items were easy to find; and, a parking lot was available.

Prices and special sales were next in importance in the Indianapolis stores studied. And the least frequently mentioned reasons for shopping a particular store were: appearance, service, and trading stamps.

Meat and poultry were the only specific foods mentioned with any regularity as reasons for selecting a store.

## NET PROFITS

The Nation's retail food store operators can now toss aside that guess work they've been relying on for many years



- Nonfood Buying in Indiana Supermarkets
- Sales Volume—Mark of Successful Grocery Stores
- Determining Net Profits on Grocery Items

in arriving at the net profits they've been making on individual grocery items. For they now have distinct guidelines showing them how to arrange their grocery displays and how to maintain inventory levels which optimize their returns.

All this has come about by USDA marketing researchers Martin Kriesberg and Martin Leiman who have developed and tested new techniques for computing grocery net profits which take into account not only margins and movement, but also handling costs and the overhead expenses incurred for individual grocery items.

This research also shows how this kind of information can help retailers improve their grocery inventory situations and their display space allocations.

The study on which this report is based is part of a broad program of research in which USDA is engaged, which is designed to increase efficiency and hold down the costs of marketing farm products.

The main objective of this research was to help food retailers improve the effectiveness of their grocery space allocations and hold down costs per unit of groceries sold. The research was accomplished in cooperation with three supermarket organizations—King Supermarkets in New Jersey, Giant Food Stores in Washington, D. C., and Food Fair's New York Division. The field work was done during 1959-60.

Here is a thumbnail list of some of the conclusions reached in this study:

All grocery items should not be charged with the same amount of store cost. Fast-moving items require more physical handling, therefore more labor costs. Large items take up more space and, therefore, more overhead cost per case carried, etc.

Profitableness of an item is arrived at by computing its net, rather than gross dollar returns to the store—and net profit is obtained by subtracting direct as well as indirect costs from the gross profit it earns.

To continue: Increasing the display on slow-moving items beyond two rows may increase their sales a little, but it materially increases their overhead cost—therefore results in even less net profit for the store.

Space allocations should take into account handling and overhead costs as well as effect on sales. And slow-moving items should get minimum displays in order to reduce overhead charges. Fast-moving items should get adequate space to facilitate restocking in case units.

And, finally, where store space permits adding rows for individual items net profitableness of the item should be taken into account; that is, not movement alone but margins times movement minus direct and indirect costs charged to the item.

In addition to providing the retailer with a basis for optimum space utilization and inventory control, USDA's research on cost determination provides

data for decision-making in introducing new items; appraising quantity discounts, and the economics of automatic distributions.

The research also provides the essential building blocks for the application of linear programming techniques in the solution of these problems.

Full details of this research are available in a separate report, which can be obtained from Martin Kriesberg, Marketing Economics Division, Economic Research Service, USDA.

## SALES VOLUME

In the keenly competitive grocery business it is an accomplishment to survive. But just what determines survival?

Sales volume per store is a more important key than the number of stores in the firm, or the legal form of ownership, as may be popularly believed. Stephen J. Hiemstra, an econ-





# THE RETAIL MARKET

omist in USDA's Economic Research Service, cites recently released census figures for proof.

The decline in low sales volume stores swept across all grocery firms from 1948 to 1958, the last year for which figures are available. Small chain units as well as small single-store businesses went the same way.

However, the proprietorships, owner-operated stores, diminished the most—over 80 percent of them in 1958 were concentrated in the low-volume (below \$100,000) sales level. In contrast, only about 9 percent of the stores owned by corporations were in the same sales level. The low volume of the proprietorships, not their independent status, is what swept many of them out of business.

Grocery stores with sales of under \$50,000 are still in the majority, according to the Census, but their number dropped 40 percent in 10 years. And those with a sales volume of \$50,000 to \$99,000 declined 25 percent.

What became of all these stores? All did not go out of business. Many expanded their sales and now are numbered among the large stores on the census lists.

The number of high-volume stores is on the increase. From 1948 to 1958, the number of stores in 3 census groups leapfrogged 9, 35, and 70 percent in sales classes \$100,000 to \$299,000; \$300,000 to \$499,000; and \$500,000 to \$999,000, respectively. Growth was largest, 441 percent, in the number of stores in the million-dollar and above sales level. Americans shopped in over 10,000 stores with an annual sales volume of \$1 million and over during 1958. In 1948, there were only 2,000

stores that did a million dollars or more in sales during a year period.

Business on this scale is a major reason for corporation success. Stores that ring up over the million-dollar mark bring corporations over 70 percent of their annual gross income. Proprietors receive only about 5 percent of their gross income from stores with a volume of that size.

The million-dollar stores can provide proprietors (and partnerships and coops, too) much of the competitive strength now enjoyed by large corporate chains. Membership in cooperatively owned or voluntarily sponsored buying groups enables firms with one or a few million-dollar stores to compete more equally with large chains.

Economist Hiemstra sees trends that indicate an increasing number of individual owners will join such buying groups and increase their sales to the million-dollar level in the years ahead.

## FOOD STAMP

*(continued from page 11)*  
agricultural program can be, and should be, an important part of any general economic program to maintain economic growth, stability, and prosperity. A national food stamp program would fit in well with a general economic program of this kind.

It would expand during periods of depression and unemployment, and would contract in periods of prosperity and high employment. Thus, it would tend to be "counter-cyclical"; that is, it would tend to dampen the severity of swings in the business cycle. From this standpoint, the program could be of great benefit to businessmen, to industrial workers, and to the public generally.

## PLENTIFULS

December, like a frosty-haired but merry-eyed old man, winding up the year's work, harvestwise, is offering us a plenitude of the year's best foods.

The list features turkeys, broiler-fryers, and cranberries. Other listings include pork, apples, grapefruit, pecans, almonds, peanuts and peanut products, honey, and vegetable fats and oils.

Here's a rundown on some of these plentiful: The turkey crop, estimated at 107 million birds, rings up an all-time record. December marketings of broiler-fryers are forecast around 4 percent below a year earlier, and prices are expected to continue below last year's levels. The cranberry output—while not so large as the previous one—is well above average. Production of pork and lard in November and December is expected to run about 8 percent above a year ago.

The apple crop is estimated to be some 15 percent larger than last year's. Grapefruit output, including California's summer crop, will run nearly 8 percent larger than in 1960.



Growth Through Agricultural Progress